

ABSTRACT

Combinations of cell lines are provided for allogeneic immunotherapy agents in the treatment of cancer. Cancer vaccines generally have been limited to the use of cells that contain at least some tumour specific antigens ("TSAs") and/or tumour associated antigens ("TAAs") having shared identity with antigens in a targeted tumour. In such cases, tumour cells often are utilised as a starting point on the premise that only tumour cells will contain TSAs or TAAs or relevance, and the tissue origins of the cells are matched to the tumour site in patients. A primary aspect of the invention is the use of immortalised normal, non-malignant cells as the basis of an allogeneic cell cancer vaccine. Normal cells do not possess TSAs or relevant concentrations of TAAs and hence it is surprising that normal cells are effective as anti-cancer vaccines. More surprisingly, a three way combination of cells obtained from metastasised cells, non metastasised tumour and cells from a normal cell line provided good therapy. For prostate cancer, for example, a vaccine may be based on one or a combination of different immortalised normal cell lines derived from the prostate according to parameters described herein. The cell lines may be lethally irradiated with, for example, gamma irradiation at 50-300 Gy to ensure that they are replication incompetent prior to use.